

Exhibit B-1



Solutions for a nanoscale world.

VEECO INSTRUMENTS INC.

**SMITH BARNEY CITIGROUP
2004 TECHNOLOGY CONFERENCE**

SEPTEMBER 8, 2004

**Ed Braun
Chairman & CEO**



VEECO PROVIDES ENABLING NANOSCALE PROCESS EQUIPMENT AND METROLOGY SOLUTIONS TO MULTIPLE GROWTH MARKETS

Data Storage

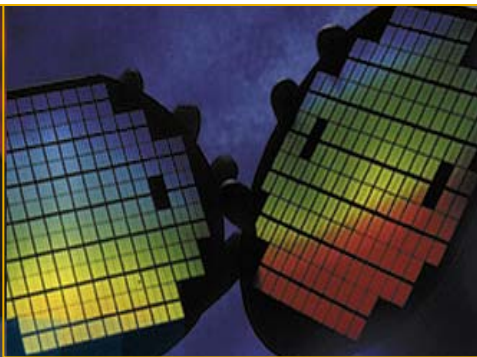
Semiconductor

Compound Semi/Wireless

Scientific Research



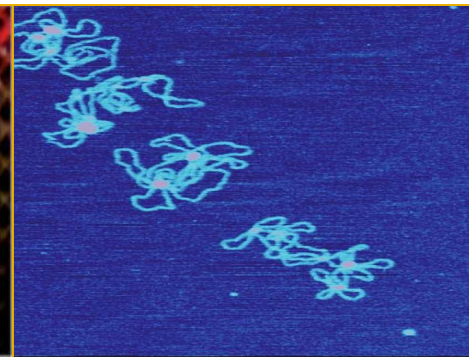
80 and 160 GB; microdrives



90 and 65 nm; 300mm



**HB-LEDs, WiFi,
camera cell phones**

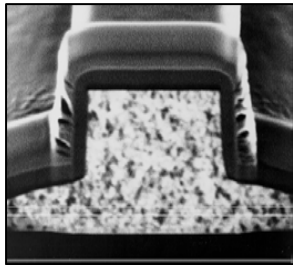


Nanotech & Life Science

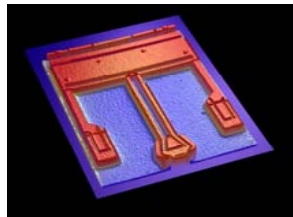
VEECO LEVERAGES CORE TECHNOLOGIES IN GROWTH MARKETS

WHAT WE DO...

PROCESS EQUIPMENT (ADD AND REMOVE MATERIAL)

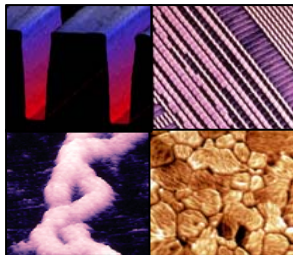


ION BEAM DEPOSITION
EPITAXIAL DEPOSITION



ION BEAM ETCH

METROLOGY (IMAGE, MEASURE MANIPULATE)

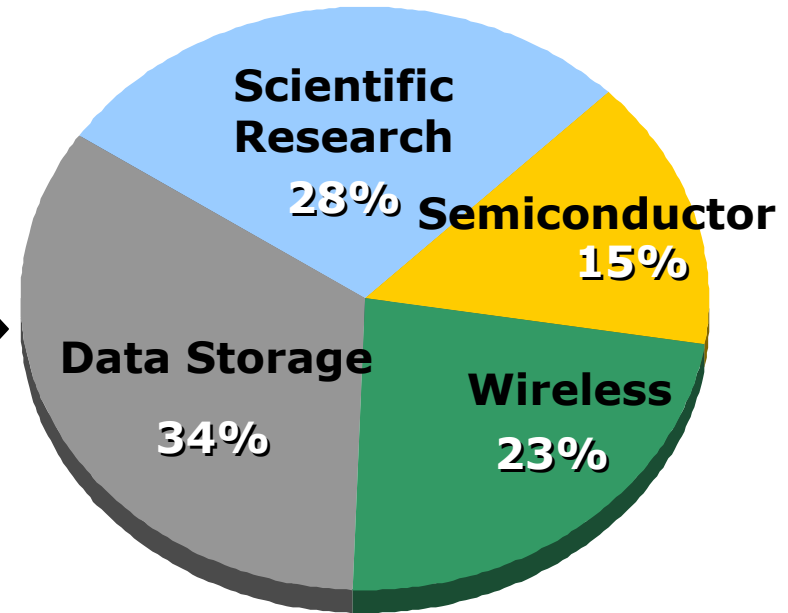


ATOMIC FORCE MICROSCOPY
OPTICAL INTERFEROMETRY



MARKETS WE SERVE...

1H '04 REVENUE (\$197.4M; UP 42%)



Multiple markets provide stable growth offsetting individual market volatility...Broader opportunities than silicon semiconductor

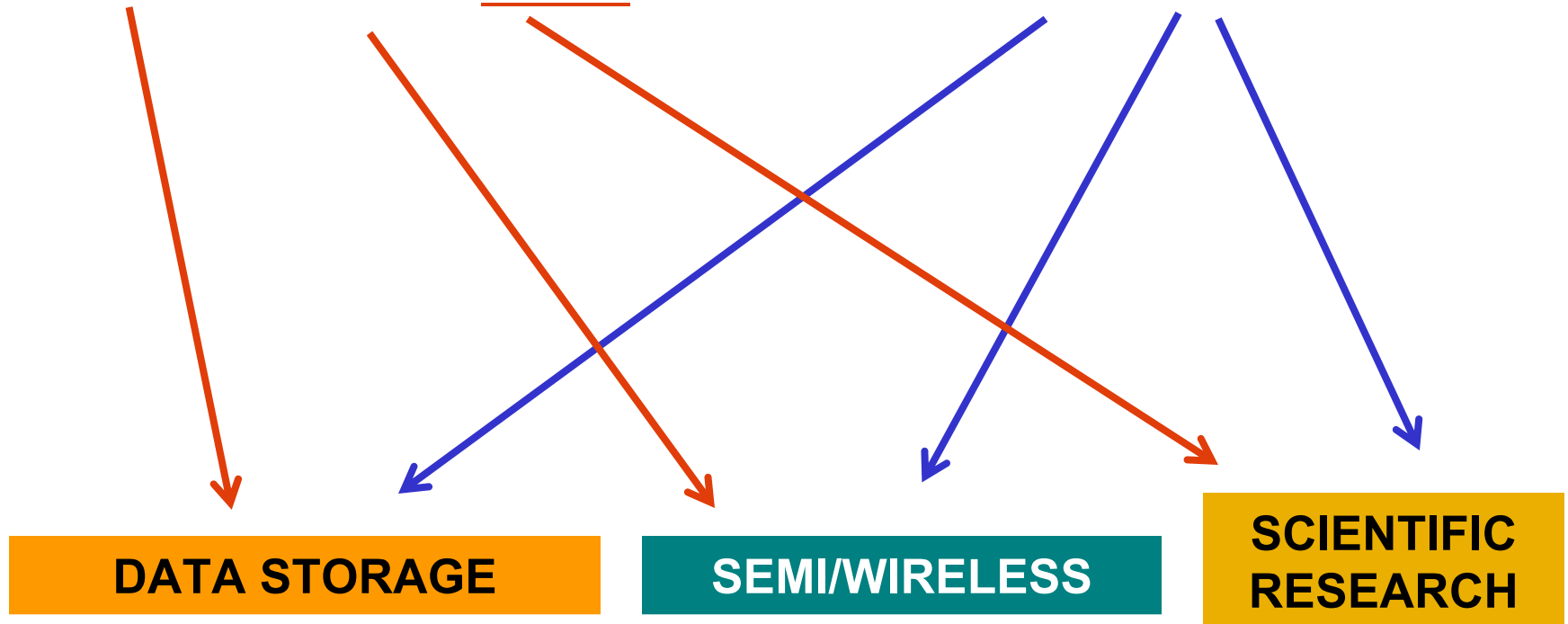
LEADERSHIP TECHNOLOGIES SERVING MULTIPLE MARKETS

PROCESS EQUIPMENT

METROLOGY

IBE PVD IBD MBE MOVCD PRECISION LAPPING

ATOMIC FORCE MICROSCOPY, OPTICAL PROFILOMETERS



**USE PRODUCT LEADERSHIP TO CREATE CRITICAL MASS
IN KEY MARKETS, AT KEY ACCOUNTS**

SERVING INDUSTRY LEADERS

MARKETS

Data Storage

*Wireless &
Compound Semi*

Semiconductor

Scientific Research

PRODUCTS

*#1 Equipment Supplier for
TFMHs;

Etch, Deposition, Lapping
and Metrology*

*Only Broad line Equipment and
Metrology Supplier

MBE, MOCVD (Epitaxial Deposition)
and Metrology*

*#1 3D AFM Metrology

Automated Atomic Force
Microscopy and Optical
Profilers*

*#1 AFMs, SPMs and Optical
Profilers

Breadth of research
solutions*

CUSTOMERS



VEECO 2004 INVESTMENT THEMES

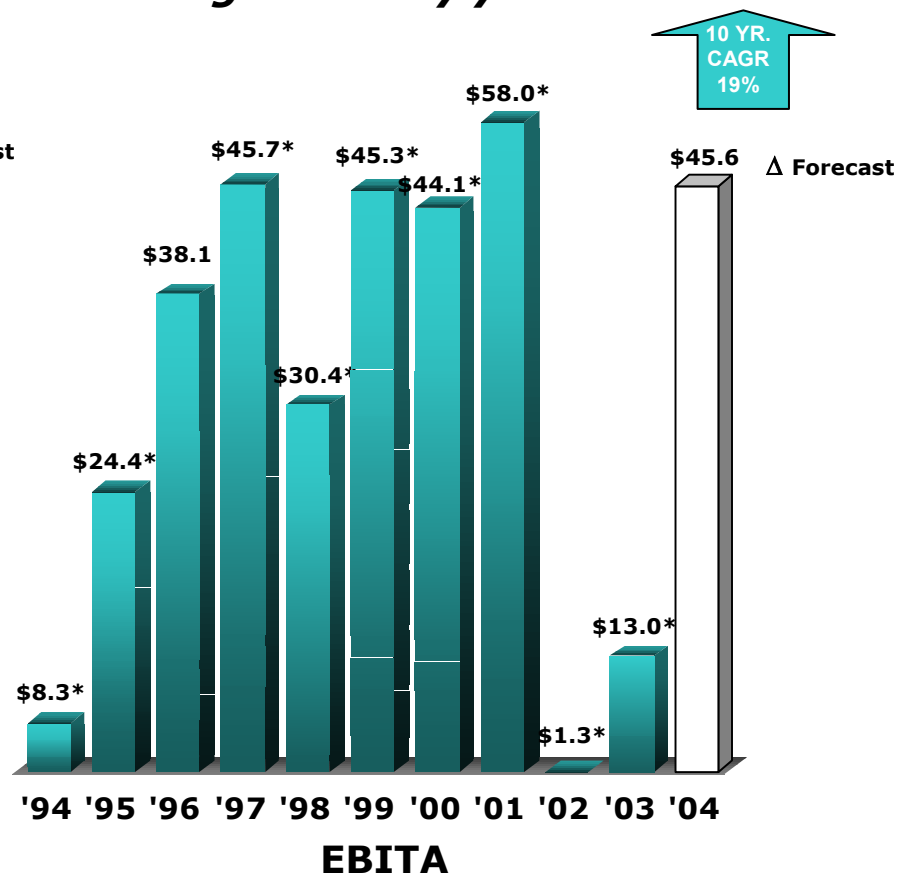
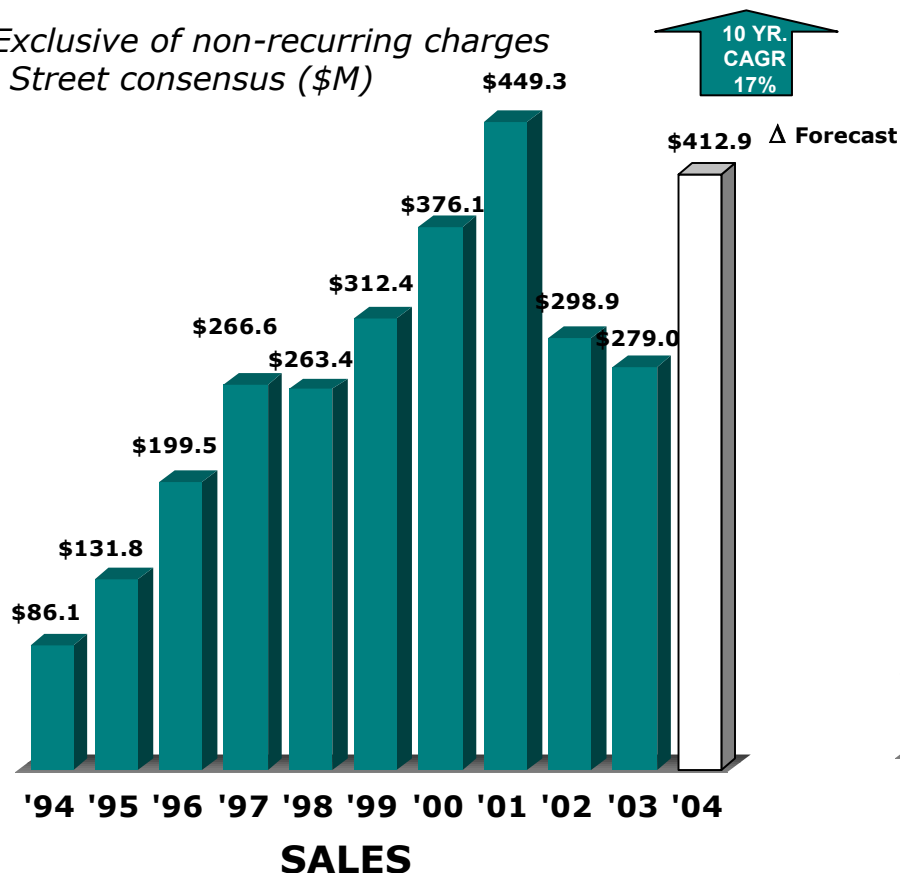
- We are a leading supplier of enabling technology for converging data storage, semiconductor/compound semi and HB LED, color display growth opportunities
- In the post PC era...microdrives, HB LEDs, color displays, and wireless technology will enable a wave of new high volume, digital consumer electronics for mass markets
- A diverse market and product mix allows Veeco a broader customer and product technology base than most other semi equipment companies
- Nanotechnology, smaller form factors, higher density and new materials will drive extensions of:
 - Moore's Law 20nm feature size
 - Areal Density 1 Tb/in²
 - Large high resolution, high brightness color displays

VEECO'S HISTORICAL FINANCIALS AND OUTLOOK

2004 Forecast ...a revenue and earnings recovery year

*Exclusive of non-recurring charges

Δ Street consensus (\$M)



- *Our Company was founded in 1990 with sales of \$30 million and went public in 1994*
- *10 year revenue growth from \$86M to \$413M...+17% CG per year ('94-'04)*

VEECO MULTI-MARKET GROWTH OPPORTUNITY

Data Storage

Continued 80 GB production ramp, development of next generation 120/ 160 GB drives and advanced development of (perpendicular heads) for 2005/2006. Microdrives to enable new wireless consumer products (Ipod, TiVo, camera/cell phones)

Semiconductor

Complete 90nm, 300 mm ramp, development of 65nm, 45nm

Wireless

Explosive growth of Blue LED's for backlighting of color displays, handheld camera/ cell phone, large color screens, PDA, Wi Max, automotive, solid state lighting and RF devices

Scientific Research

Continued strength of research AFMs/SPMs
Nanoscience emerges (life sciences, material sciences genomics)

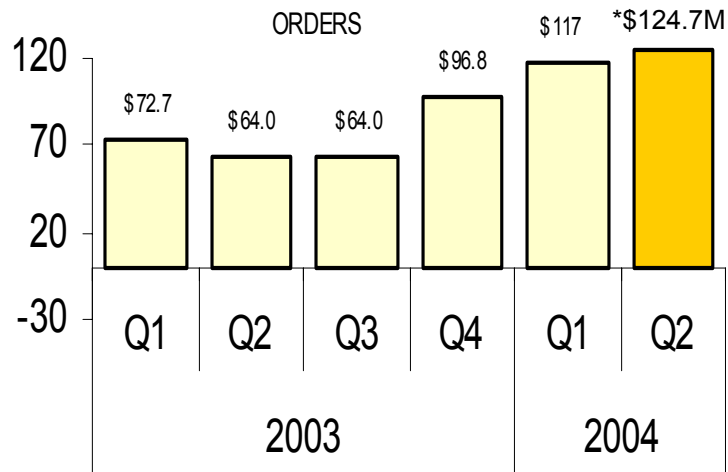
The content of Veeco's enabling technologies increases in new consumer applications

VEECO: EQUIPMENT FOR HIGH GROWTH DIGITAL, WIRELESS CONSUMER PRODUCTS

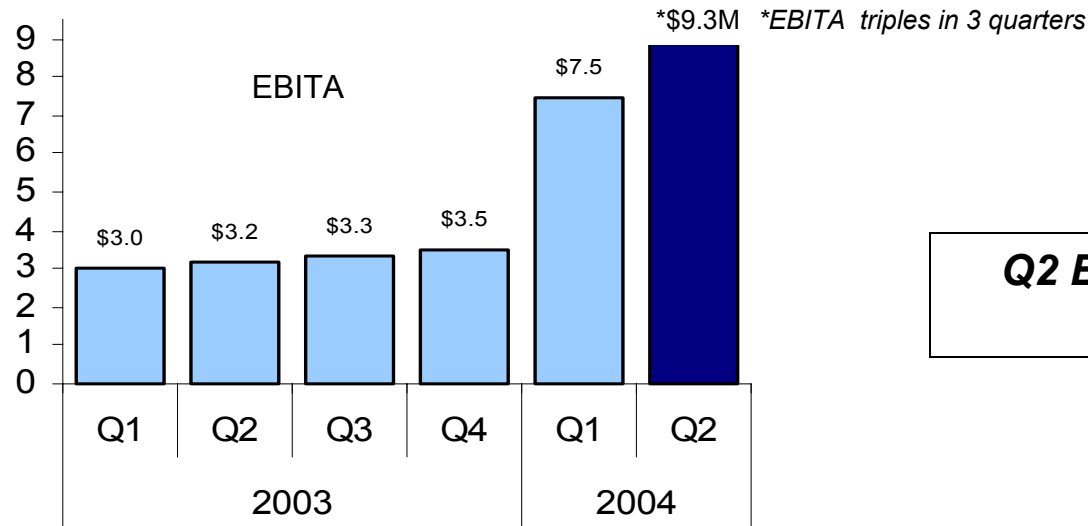
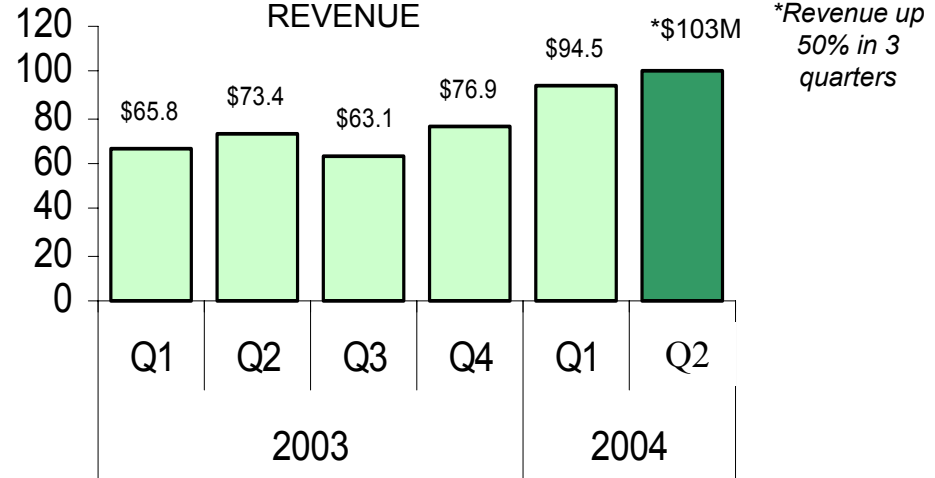


VEECO IN A BROAD MULTI MARKET RECOVERY

**Orders doubled in 3 quarters*

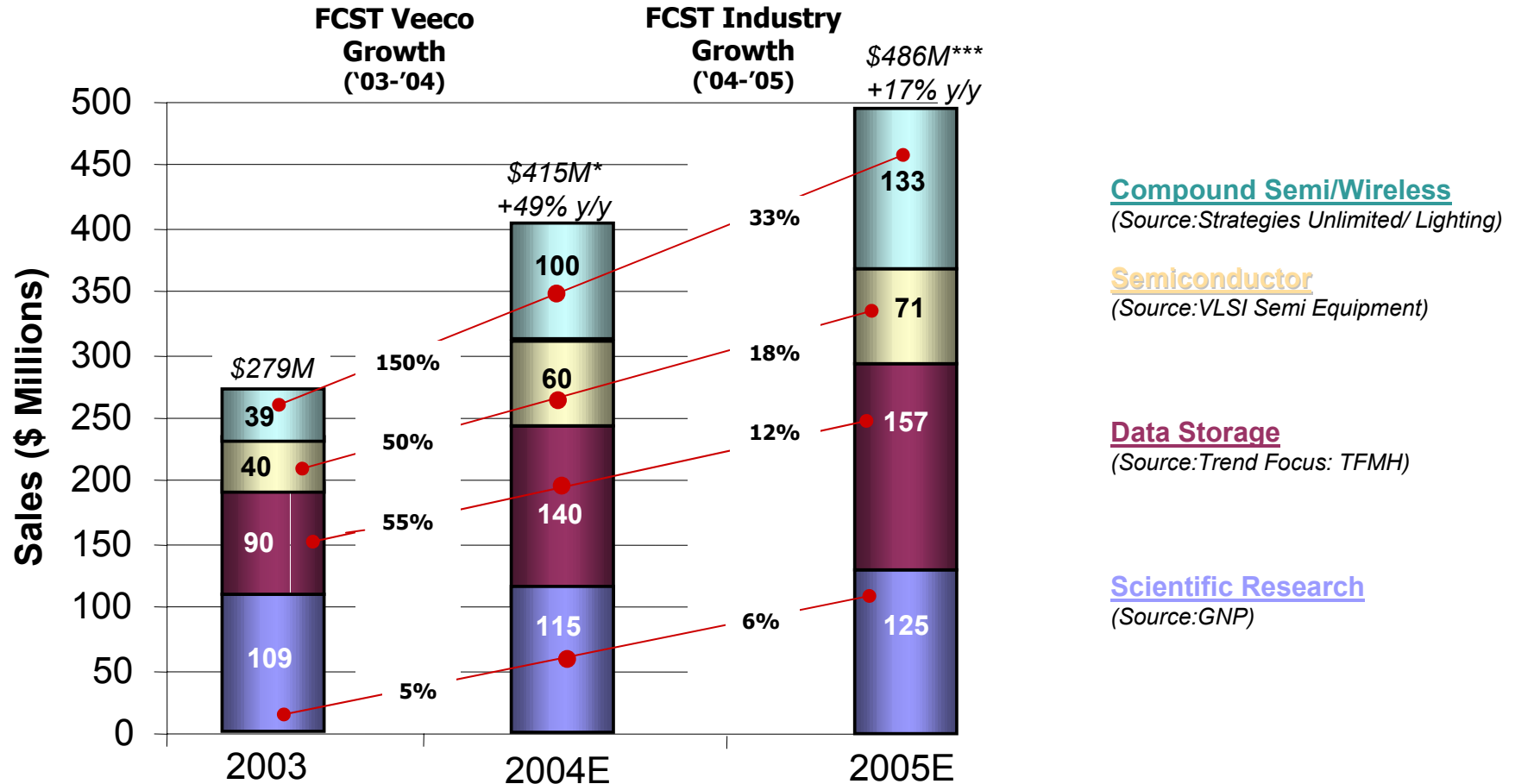


REVENUE



Q2 Backlog increased to \$164M

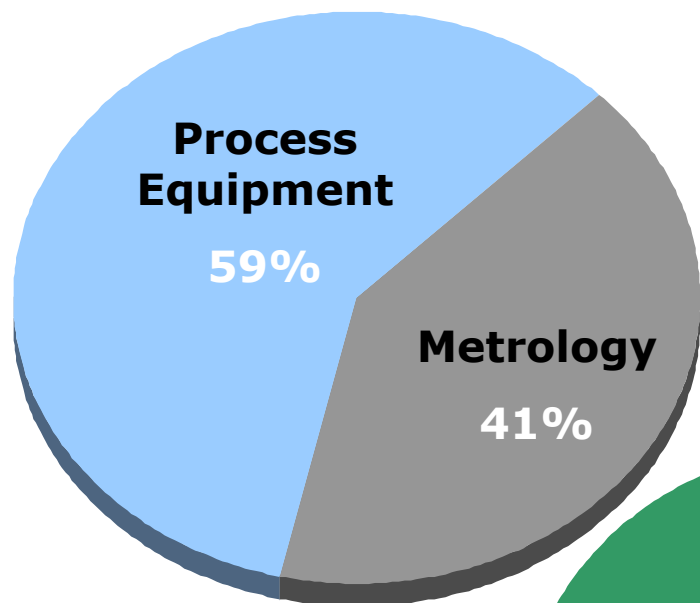
VEECO GROWTH OPPORTUNITY BY MARKET



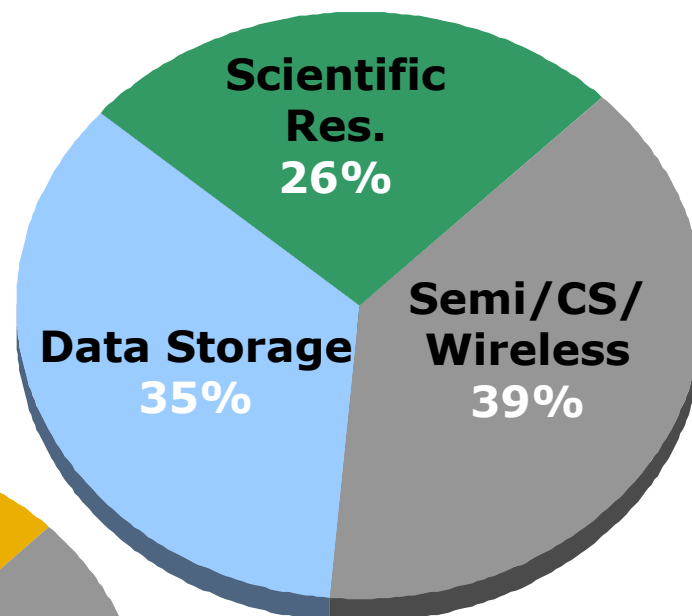
* 2004 Analysts' Consensus

*** Veeco 2005 Assuming Growth Per Industry Forecast

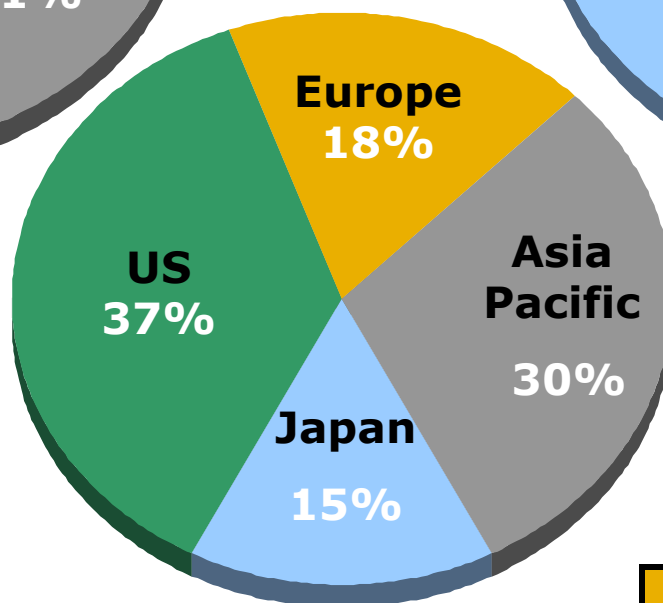
DIVERSITY OF MULTIPLE MARKETS, PRODUCTS AND GEOGRAPHIC PENETRATION



MULTIPLE PRODUCTS



MULTIPLE MARKETS



MULTIPLE REGIONS

**Q2 2004 Sales \$102.9M,
up 40%**



Solutions for a nanoscale world.



MARKETS

YOUR NEXT COMPUTER....

Losing the wires is only the beginning



There are 1.5 billion mobile phones in the world today. They browse the Web, take pictures, send email, watch movies and play games. Soon they could make your PC obsolete.

WIRELESS CONSUMER PRODUCT GROWTH WILL DRIVE NEXT WAVE OF EQUIPMENT SPENDING



- Convergence of Semi/Data Storage/Wireless creates a new class of high volume, high growth consumer products with explosive unit growth from 2004-2007
- Wireless mobile consumer products (including cell phones) will approach 2 billion units by 2010... Compared to the installed base of 500 million PC's

HOME OF THE (NEAR) FUTURE

*By 2010 each household will own 10 HDD's**

Mobile Applications



**New Microdrive
(.85 dia.)**



MP4 Video



Laptop



**MP3 Music
(i.e., iPod)**



Mobile Phone



**Automobile
GPS Navigation**

Home Applications



Home Media Server



TiVo/DVR



**Entertainment
Centers/PCs**

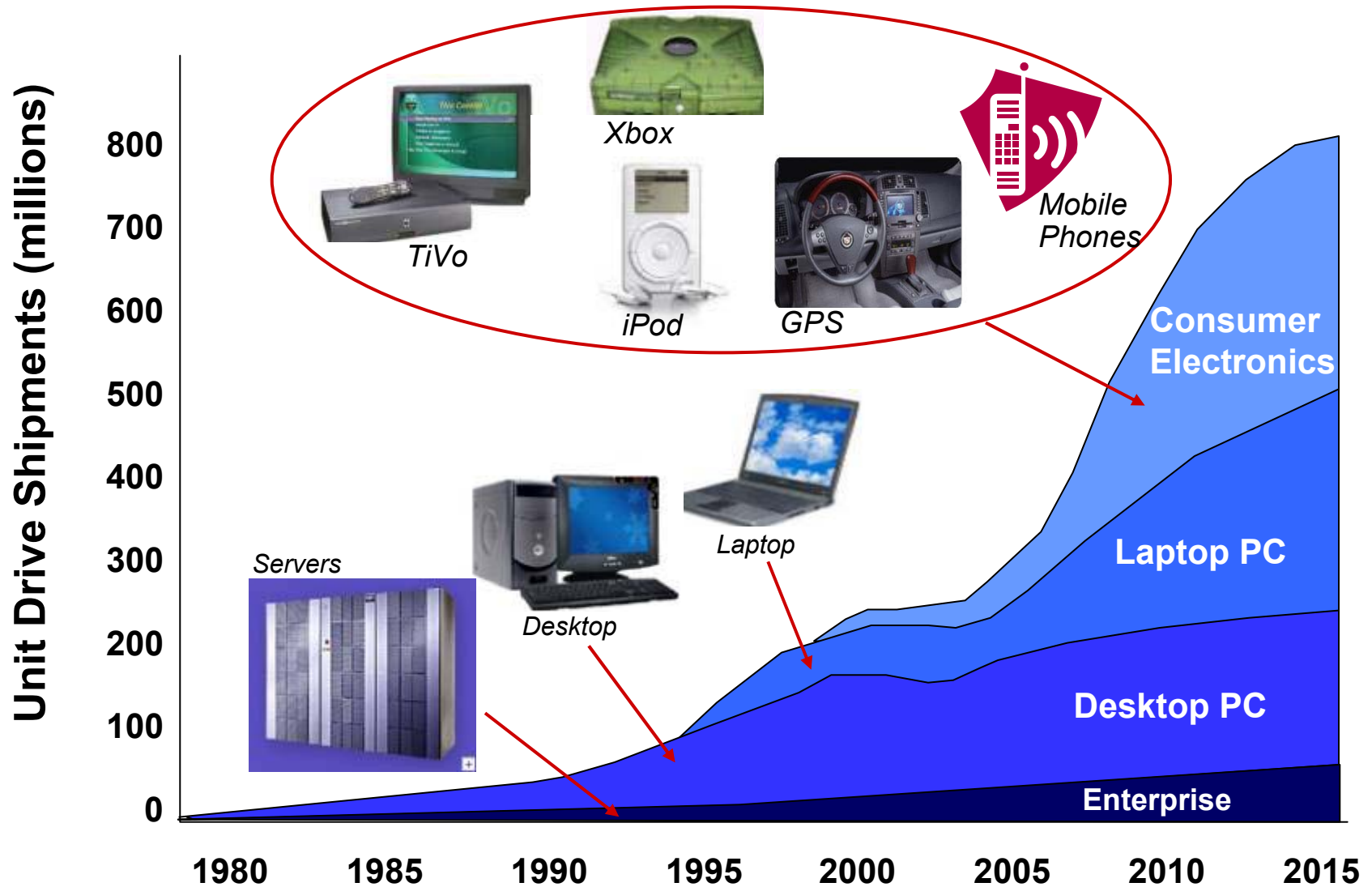


**Game (Xbox,
PlayStation, etc)**

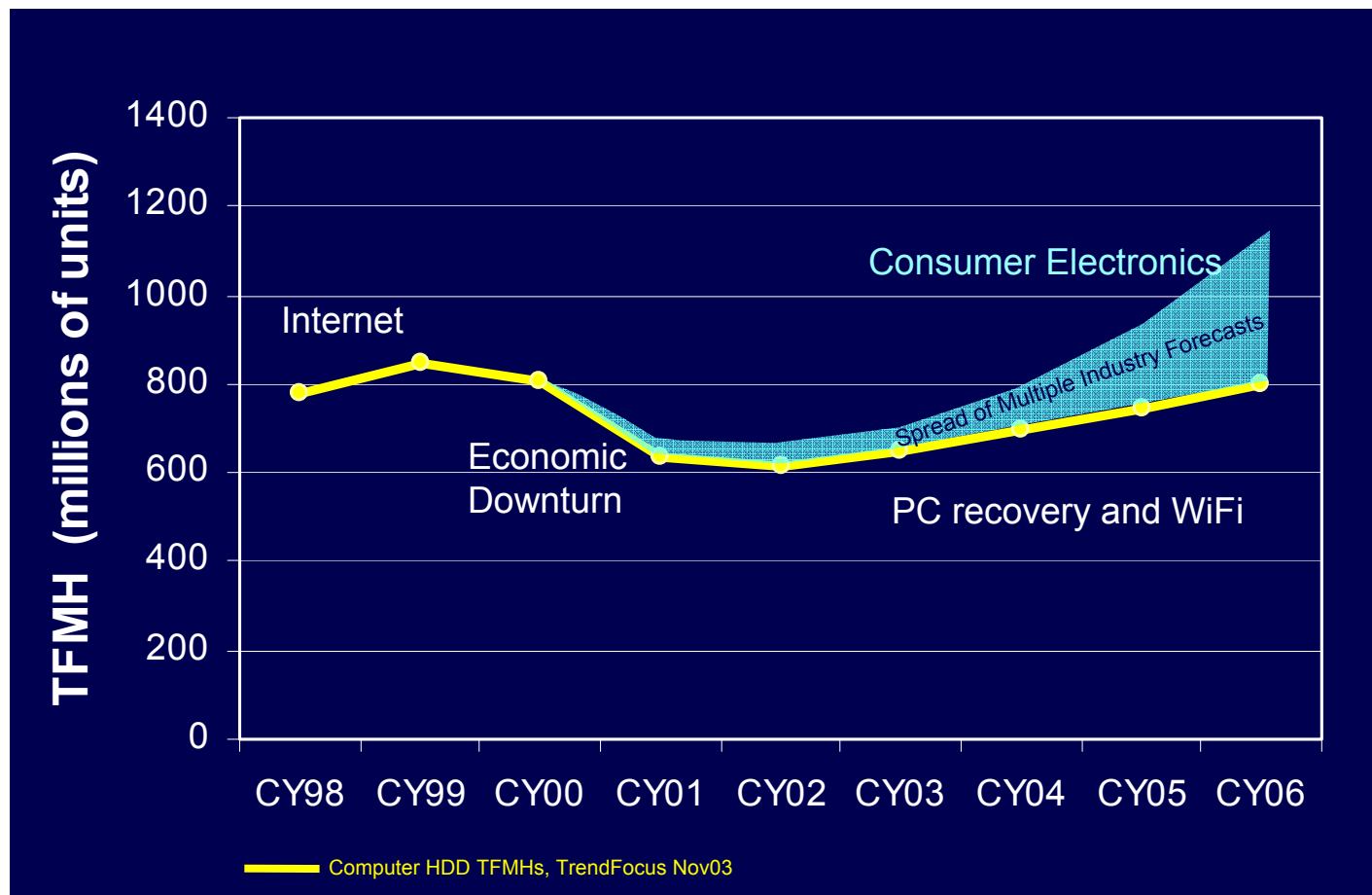
* Source: Hitachi Global Storage Technologies

HARD DISK DRIVE GROWTH STORY

...opportunity for unit growth to double



TFMH FORECASTED GROWTH (REVENUE AND UNITS) TO REACH RECORD LEVELS



CE Examples

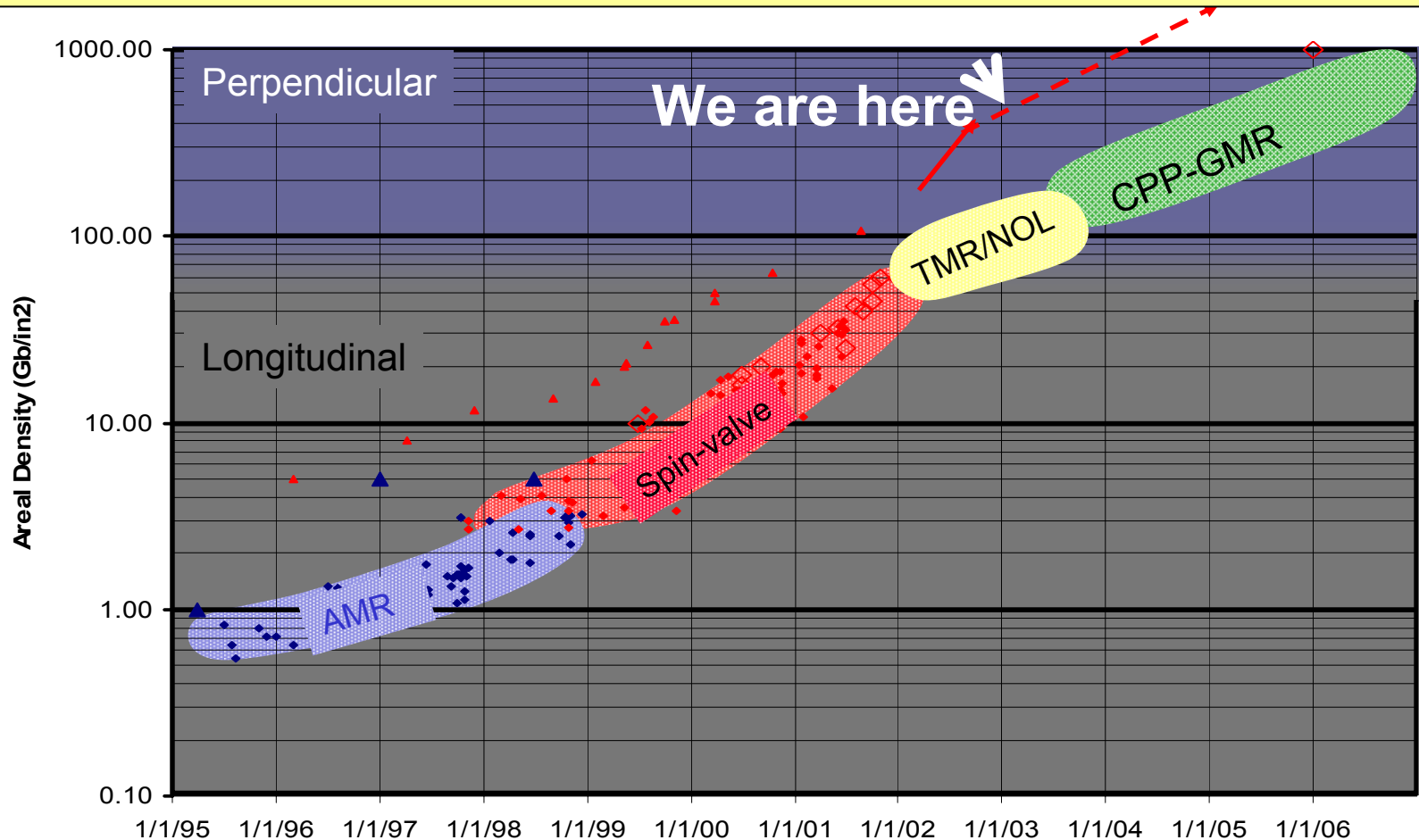
- MP3 (Microdrive)
- MP4 (Microdrive)
- Digital Photo (Microdrive)
- TiVo
- Automobile GPS
- Other

"In 5-7 Years Consumer Electronic HDD could = PC shipments"

Bill Watkins, Seagate March 2004 Diskcon Singapore

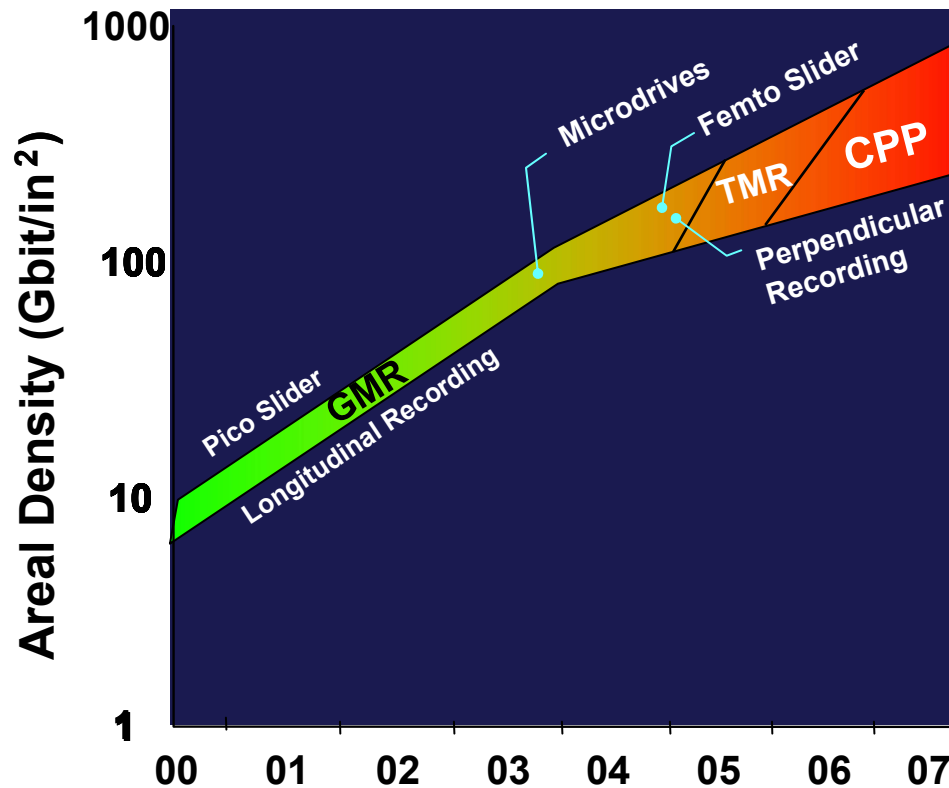
VEECO'S DATA STORAGE OPPORTUNITY: SHRINKING DIMENSIONS REQUIRE "RE-TOOLING"

Areal density roadmap increases (50% per year) toward CPP (perpendicular recording) capable of 1 Terabit/in² (2006)... will require new manufacturing technology



UNPRECEDENTED READER, WRITER, SLIDER AND FORM FACTOR CHANGES OCCURRING SIMULTANEOUSLY

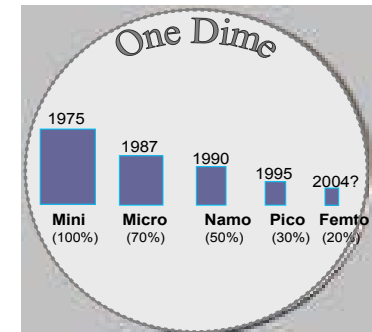
TFMH Technology Changes Drive Capital Equipment Growth



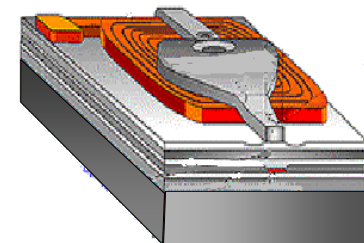
Microdrives



Slider Shrinks



Reader & Writer Development



VEECO'S DATA STORAGE OPPORTUNITY: INDUSTRY'S BROADEST LINE OF ETCH, DEPOSITION AND METROLOGY

- Industry's broadest line of etch, deposition and metrology
- Industry's largest installed base (3,000 systems in the field)...Strong key account relationships
- Aii lapping, dicing and slicing ... total slider fab solution opportunity...first saw order
- Customers currently require upgrade and new technology...for 80 GB ramp, intro of 120GB and research for CPP... Veeco launches NEXUS etch and deposition solutions
- ***First half orders \$71.4M (up 45% vs '03)***
revenue \$67.0M (up 54% vs '03)

VEECO: IN EVERY STEP OF YOUR TFMH PROCESS



Process Equipment



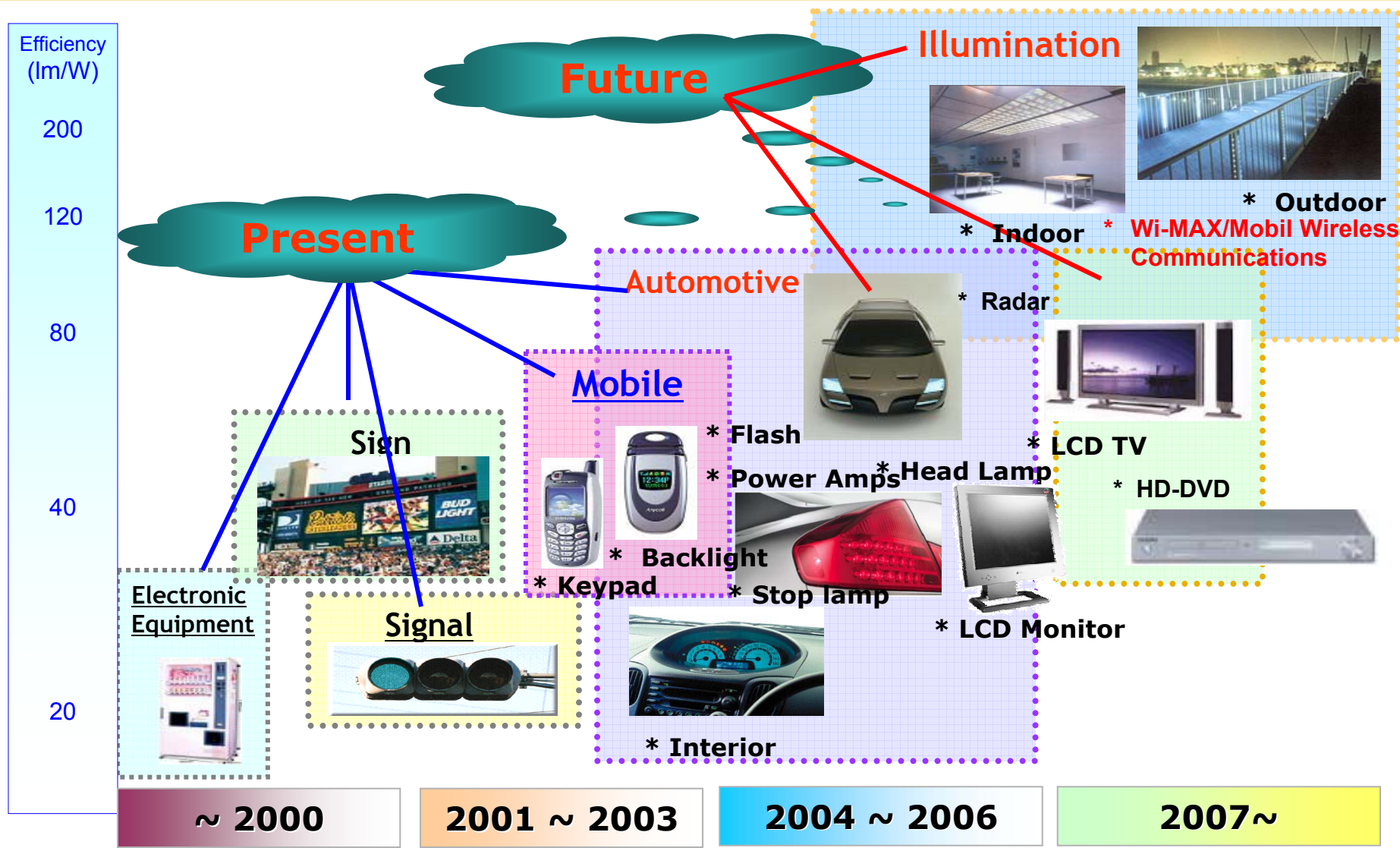
Metrology



WIRELESS/TELECOM...Q2 record Veeco orders \$51.1M

- Veeco is the leading supplier of thin-film process equipment and metrology solutions to the compound semiconductor industry
 - Unique ability to provide both MBE and MOCVD – two epitaxial technologies that determine functionality and performance of devices
 - Strategy to become a “one-stop shop” for equipment
- Growth in camera/ cell phone applications. Fully featured phones include >20 compound semi devices per phone. Cell phone sales expected to nearly double to 750M units by 2008
- LED backlighting growth opportunity to include larger color display applications (mobile PC's and flat panel TV displays)
- New automotive applications, headlights, fog lights and instrument panel displays
- Record Q2 orders \$51.1M, total of 26 MOCVD and 7 MBE systems, included 6 multiple system orders
- **First half orders \$90.2M up 346% vs '03**
revenue \$45.2M up 145% vs '03

HB LEDS...A MULTIPLE MARKET GROWTH OPPORTUNITY



Source: Samsung BLUE 2004

